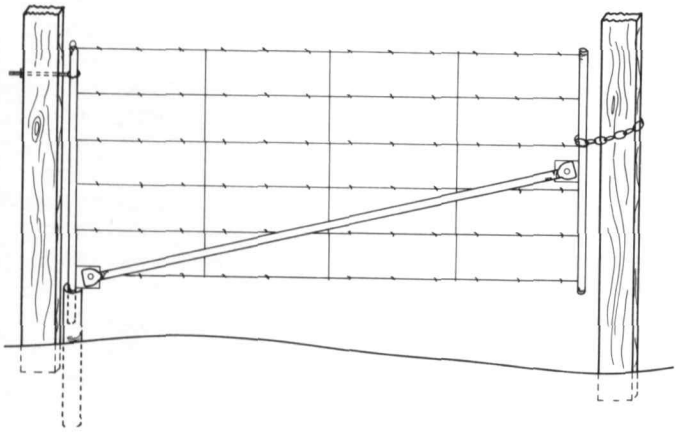
McRae's Hinged Wire Gate

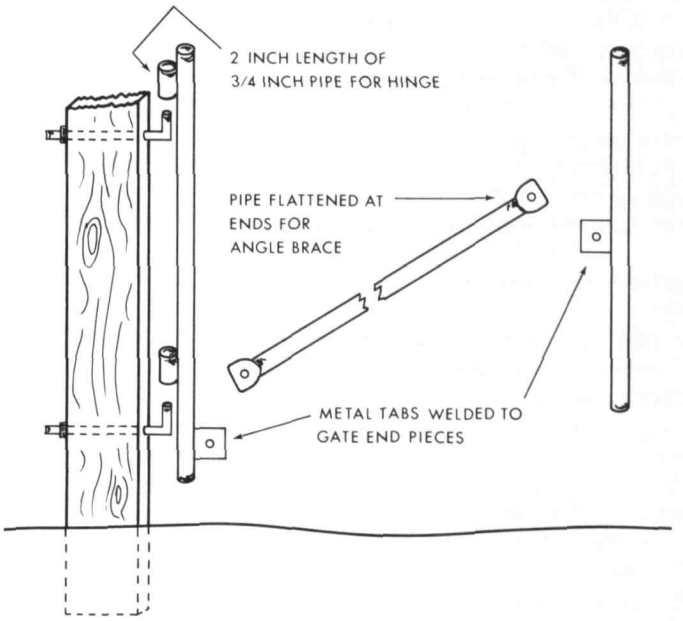
S. Clark Martin

Walter McRae's hinged wire gate is cheap, easy to build, and it works. Walter and his wife live on a small farm near St. David, Arizona. And, since there is always more work than Walter can do, he saves time and energy everywhere he can. His swinging wire gates saves some of each everyday. It is no strain to open or close and it doesn't tangle when left open.

McRae's gate looks *almost* like any other wire gate but it swings precisely enough to engage an automatic double-ring latch. What's different is a diagonal bar that connects the bottom of the hinge end to the center of the latch end. (Figure 1). Gate ends can be pieces of pipe, angle iron, or steel fence posts. The diagonal must be stiff enough to support the gate without sagging or twisting. A piece of pipe with the ends flattened and drilled for bolting to the gate ends works fine.



The bolted joints between the diagonal and the ends must be tight to hold the latch end vertical. McRae welds tabs of sheet steel (5/16" or 3/8" stock) 2-3 inches square to the gate ends and bolts the diagonal to these. (Figure 2). Bolted joints let you adjust the angle of the diagonal if the gate sags or rides too high but don't let the latch end lean "in" or "out". If the gate is hinged on the lower side, you can adjust it to close at the right height even on sloping ground. The ends of the gate can be kept vertical and parallel to the posts by tightening or loosening the cross wires.



To assemble the gate, fasten the end pieces to the diagonal, hang it on its hinges, then fasten the first wire from the center of the latch end to the center of the hinge end and pull it tight enough to hold the latch end at the desired height. Pull the other cross wires just tight enough to hold the latch end vertical. Put in as many vertical spacer wires as you like, or use mesh fencing if you prefer.

Hinges and fasteners are up to you. The bottom hinge can be a piece of pipe set in the ground as in Figure 1. Figure 2 shows another kind of hinge. If you use an automatic latch the hinges must swing the gate rather precisely. If you use a chain and snap or padlock, or a wire loop, a little wobble won't matter.

Heavy gate posts are not necessary because the gate is relatively light. Gates can be almost any length. Loren McRae, Walter's son, is using a 16-foot unit and plans to build a 20-footer. So, if your tired of struggling with contrary wire gates, go to your scrap pile for the makin's of one that swings. ●

The author is professor of range management, School of Renewable Natural Resources, University of Arizona, Tucson, Arizona.

Editor's Note: From time to time we get requests by mail or conversation for articles on how to do or make things. This article falls in that category, hope you like it. The gate looks like a good bet for roads that are used by the public or those around the ranch headquarters that are opened and closed several times a day.